

**From:** [Krasko, Anna](#)  
**To:** [David W. Payne](#)  
**Cc:** [dahlend@battelle.org](#); [Taylor, Melissa](#); [Jablonski, Gary \(DEM\)](#); [Jeff Loureiro](#)  
**Subject:** Response to Study C Delineation Sampling  
**Date:** Wednesday, May 22, 2019 3:07:00 PM

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Dave,

EPA, with assistance of our technical contractor team, has reviewed the information you submitted on 5/6, along with the supplemental information you provided on 5/14 and 5/17. You can start the proposed sampling in Area C where you have access agreements.

However, EPA believes that additional evaluations will be needed to delineate western boundary of this Area. It is our understanding following our call and additional information prepared by our contractors and e-mailed to you today, that LEA will need to delineate along the western boundary of Study Area C. Approach for this would be resolved pending additional call later this month, after you had a chance to review the information provided.

As was also mentioned in today's call, LEA may also need to perform additional sampling pending final consensus on the approach to address non-dioxin contamination where dioxin is not detected.

Thank you,

Anna

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**From:** David W. Payne <dwpayne@loureiro.com>  
**Sent:** Monday, May 06, 2019 5:37 PM  
**To:** Krasko, Anna <krasko.anna@epa.gov>  
**Cc:** dahlend@battelle.org; Taylor, Melissa <Taylor.Melissag@epa.gov>; Jablonski, Gary (DEM) <gary.jablonski@dem.ri.gov>; Jeff Loureiro <jjloureiro@loureiro.com>  
**Subject:** Study C Delineation Sampling

Anna,

The attached drawings show proposed additional sampling locations for delineation of contamination found in Study C of the Source Area. This includes sampling to the east onto the Cumberland's Farm property, to the north across Rt 44 on the 2121 Smith St property, sampling on the western bank of Allendale Reach and to the northwest along both banks of the Woonasquatucket River north of Smith Street, and south to further delineate the northern boundary of the RCRA Subtitle C cap.

Based on preliminary review of Study C analytical data, additional investigation is necessary to 1) confirm the extent of 2,3,7,8-TCDD north of Smith Street (7 locations, PDI-SA-SB-0200 through -0204, PDI-SA-SB-0246 and PDI-SA-SB-0247); 2) define the extent of 2,3,7,8-TCDD east of Brook Village on the adjacent Cumberland Farms property (8 locations, PDI-SA-SB-0205 through -0209, and PDI-SA-SB-0249 through -0251); and 3) delineate elevated concentrations of contaminants detected in 0013 and 0011 in Study C (2 locations, PDI-SA-SB-0217 and PDI-SA-SB-0210). Note that 0013 had a concentration of 16 ng/kg which is why it's not shown as an exceedance on previous drawings. These locations will be subsampled at the 0-0.5', 1-2', 2-3', 3-4' intervals for dioxin and furan, SVOCS, metals. Only dioxins and furans will be analyzed initially with SVOC and metals initially placed on hold. Locations of these soil borings are depicted on Figure 1.

Samples located along the bank of the Woonasquatucket River will be positioned on the bank at one foot above the 100-year flood elevation, two feet below the 100-year flood elevation, and four feet below the 100-year flood elevation. Figure 1 depicts the proposed transects and sample locations. The proposed sampling plan for the transects south of Smith Street includes three samples per

transect on the western bank of the Woonasquatucket River, these transects are set at 100' intervals and approximately aligned with historical sample locations CMS-001 through CMS-005. Transects aligning with historical samples CMS-002 through CMS-005 have been surveyed and are shown in Figure 2. North of Smith Street, three samples will be taken on both the west bank and east bank of the Woonasquatucket River, for a total of six samples per transect. Proposed transects north of Smith Street are spaced at approximately 100' intervals, starting at the Smith Street bridge. Samples will be collected from the 0-0.5' and 1-2' intervals for dioxin/furans, VOCs, SVOCs, metals (plus mercury), PCB (Aroclors), and pesticides.

Additional sampling along the extent of the proposed RCRA Subtitle C cap will provide additional data to design the extent of the cap. The locations inside of the currently proposed extent of cap indicate that shallow samples are underlain by more contaminated soils. Additional sampling at Study C locations north of the cap extent (PDI-SA-SB-0022, -0035, -0050, and -0075) as well as 0211 will be completed to determine if concentrations increase with depth, or if the proposed cap extents are acceptable. Samples will be collected to a depth of 8 feet below grade (previous samples extended to 4 feet below grade) with samples collected at 1' intervals for dioxin/furans, and SVOCs. PCBs will also be collected from the 0211 and 0022 to delineate PCBs detected in the 7 to 8 ft interval in CMS-448.

**David Payne, P.E.**

Project Manager

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